Notice No.1

Rules for the
Classification of Trimarans, July 2020

The status of this Rule set is amended as shown and is now to be read in conjunction with this and prior Notices. Any corrigenda included in the Notice are effective immediately.

Please note that corrigenda amends to paragraphs, Tables and Figures are not shown in their entirety.

Issue date: June 2021

Amendments to	Effective date	IACS/IMO implementation (if applicable)
Volume 1, Part 6, Chapter 1, Section 1	1 July 2021	N/A
Volume 1, Part 6, Chapter 3, Section 2	1 July 2021	N/A

Lloyd's Register

Volume 1, Part 6,
Chapter 1
Introduction

■ *Section 1*
Application

1.3 Symbols and definitions

(Part only shown)

1.3.1 The symbols and definitions for use throughout this Part are as follows:

t_p = plating thickness, in mm

~~X = longitudinal distance, in metres, measured forwards from the aft end of L_R to the position or centre of gravity of the item being considered~~

z = vertical distance, in metres, from the hull transverse neutral axis to a position under consideration

Volume 1, Part 6,
Chapter 3
Global Strength Requirements

■ *Section 2*
Hull girder strength

2.4 Longitudinal bending strength

(Part only shown)

2.4.3 The longitudinal strength of the ship is to satisfy the following criteria for the hogging and sagging conditions:

$$\sigma_B < \sigma_p$$
$$\sigma_D < \sigma_p$$
$$\sigma_{ws} < f_{\sigma ws}\, \sigma_{ydMild}$$

where

$$\sigma_p = f_{\sigma hg}\, f_{hts}\, \sigma_{yd}$$

$$f_{\sigma hg} = 0{,}75 \text{ from } 0{,}3\, L\, L_R \text{ to } 0{,}7L\, L_R$$

$$= 0{,}319 + 2{,}311\frac{X}{L\, L_R} - 2{,}974\left(\frac{X}{L\, L_R}\right)^2 \text{ for continous structural members aft of } 0{,}3L\, L_R \text{ and forward of } 0{,}7L\, L_R$$

where
X = longitudinal distance, in metres, from the F.P. for locations within the forward end region (forward of $0{,}7L_R$) and from the A.P. for locations within the aft end region (aft of $0{,}3L_R$)

$$f_{\sigma ws} = \text{limiting working stress coefficient}$$
$$= 1{,}2$$

Note that the σ_{ws} criteria may be relaxed if it can be demonstrated that either:

- A continuous fatigue monitoring system is to be adopted for the in-service life of the ship; or
- A fatigue design assessment procedure is applied which demonstrates that a higher limiting working stress coefficient, $f_{\sigma ws}$, may be applied.

σ_B, σ_D and σ_p are given in *Table 3.2.1*

f_{hts}, $f_{\sigma hg}$, $f_{\sigma ws}$, M_{wHog}, M_{wSag}, M_{tot}, σ_{yd}, and σ_{ydMild} ~~and x~~ are defined in *Vol 1, Pt 6, Ch 1, 1.3 Symbols and definitions*.
~~L~~ L_R is defined in *Vol 1, Pt 1, Ch 1, 5.2 Principal particulars*.

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